

bined with current cervical cancer screening and HPV disease treatment practices in Turkey. For the vaccination strategy 85% coverage rate was assumed in the frame of a mandatory school-based program. Reference strategy was current cervical cancer screening and HPV disease treatment practices in Turkey. Costs were estimated from the perspective of the Turkish healthcare system, using direct medical costs associated with the diagnosis and treatment of cervical diseases. **RESULTS:** Over 100 years, cumulative % (absolute) reduction in the incidence of 6/11/16/18-related cases of CIN1, CIN2/3, cervical cancer, cervical cancer deaths, genital warts-female, and genital warts-male was 78% (4,894), 72% (32,537), 57% (73,277), 54% (40,513), 86% (404,674), and 86% (409,029), respectively, in the vaccination group compared to the reference group. Number of 6/11/16/18-related CIN1, CIN2/3, cervical cancer, cervical cancer deaths, and genital warts (both in female and male population) was halved in the vaccination strategy group compared to the reference strategy group by year 19, 24, 41, 44, and 14, respectively. The incremental cost-effectiveness ratio for routine vaccination of 12-year-old girls was 18,251 TRY/QALY over 100 years. **CONCLUSIONS:** A quadrivalent HPV vaccination program can reduce the incidence of cervical cancer, CINs and genital warts in Turkey at a cost-per-QALY ratio within the range defined as cost effective.

PCN76

COST-EFFECTIVENESS ANALYSIS OF COMPLIANCE WITH CLINICAL PRACTICE GUIDELINES IN SARCOMA TREATMENT: AN ECONOMIC EVALUATION IN TWO EUROPEAN REGIONS

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OBJECTIVES: Sarcomas are rare tumours (1-2% of all cancers) with high discordance in diagnosis and low compliance with clinical practice guidelines (CPG). The objective was then to perform a cost-effectiveness analysis (CEA) of compliance with CPG compared to non compliance in the treatment of sarcoma. **METHODS:** The study included patients aged >15 years with histological diagnosis of sarcoma treated at the University hospital of Lyon and/or Léon Bérard Cancer centre (Rhône-Alpes region, France) in 2005/2006 or in public hospitals of Veneto (Italy) in 2007. The time horizon was three years post diagnosis. The hospital's perspective was adopted, based on a microcosting approach. All costs were expressed in euros 2009. A 4% annual discount rate was applied to both costs and effects. Incremental Cost Effectiveness Ratios (ICER) were expressed as costs per life year gained, per disease-free year gained, and per relapse-free year gained when treatments were compliant with CPG compared to not compliant. Probabilistic sensitivity analyses were performed based on 10000 bootstrap replications both with and without adjusting data to grade. **RESULTS:** A total of 219 patients were included in the study. Compliance with CPG was observed for 118 patients (54%). Average total costs reached €23,571 when treatment was in accordance with CPG and €27,313 otherwise. Compliance with CPG strictly dominates for disease-free and relapse-free survivals. When handling uncertainty, probabilities that compliance with CPG still strictly dominates were 33%, 63% and 88% for overall, disease-free, and relapse-free survivals, respectively. When costs and effects were adjusted to grade, probabilities reached 17%, 48% and 75%, respectively. **CONCLUSIONS:** Given that few cost-effectiveness analyses have examined compliance with CPG in rare tumours, these results are promising and should encourage physicians' efforts to increase their compliance to CPG.

PCN77

COST-EFFECTIVENESS OF GRANULOCYTE COLONY STIMULATING FACTOR (G-CSF) IN PRIMARY (PP) AND SECONDARY PROPHYLAXIS (SP) OF FEBRILE NEUTROPENIA (FN) IN PATIENTS WITH STAGES 2 AND 3 BREAST CANCER (BC) UNDERGOING CYTOTOXIC CHEMOTHERAPY IN FRANCE

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OBJECTIVES: To estimate the cost-effectiveness of G-CSF PP strategies versus pegfilgrastim SP and G-CSF SP strategies versus no prophylaxis for decreasing FN incidence in patients treated with cytotoxic chemotherapy for stages 2 and 3 breast cancer. **METHODS:** A Markov model was designed to track health outcomes (FN events) and medical direct costs (G-CSF, administration and FN episode costs, calculated with French Sickness Fund perspective). The model compared 9 prophylaxis strategies for three frequent BC chemotherapies (TAC [docetaxel, doxorubicin, cyclophosphamide], TC [docetaxel, cyclophosphamide] and AC-T [doxorubicin, cyclophosphamide—docetaxel]): pegfilgrastim (Neulasta®), 6-day filgrastim (Neupogen®), 11-day filgrastim, 6-day lenograstim, as either PP (initiated from first cycle) or SP (initiated after FN event), or no prophylaxis. Inputs included transition probabilities (relative FN risks depending on the chemotherapy, determined from expert opinion and published studies: TAC, 25%; TC, 10% and AC-T 7% for AC and 21% for T), FN history and chemotherapy cycle), as well as unit costs for prophylaxis resources and overall cost associated with FN. Incremental cost-effectiveness ratios (ICERs) were expressed per FN event avoided. PP strategies were compared to SP with pegfilgrastim and SP strategies were compared to no prophylaxis. **RESULTS:** In the high risk population (chemotherapy FN risk ≥20%), PP-pegfilgrastim was the most cost-effective PP-G-CSF versus SP-pegfilgrastim. With TAC, ICER was €8,383 per FN avoided. In less cytotoxic regimens without considering patient risk factors, after an FN event, SP-pegfilgrastim was the most cost-effective SP-G-CSF compared to no prophylaxis, with ICERS ranging from

€4614 with TC to €4795 with AC-T. **CONCLUSIONS:** According to our model based on French cost data, pegfilgrastim in PP and SP is more cost-effective than PP and SP with filgrastim and lenograstim in BC. PP-pegfilgrastim is the most cost-effective PP strategy in case of high risk of FN.

PCN78

REVIEW OF THE RECENT PHARMACEUTICAL ADDITIONS TO THE TREATMENT OF COLORECTAL CANCER

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OBJECTIVES: Colorectal cancer (CRC) is one of the most prevalent forms of cancer worldwide. This review aims to report on the most recent clinical and cost-effectiveness data available for five of the most often used drugs in the treatment of advanced (ACRC) and non-advanced CRC; oxaliplatin, irinotecan, bevacizumab, panitumumab and cetuximab. **METHODS:** A systematic review of the literature was performed for the clinical effectiveness. Articles were divided on type of CRC, ACRC or non-advanced CRC, and for ACRC on time point of treatment (1st, 2nd or 3rd line). If possible, data on overall survival (OS) and progression free survival (PFS) were extracted. An additional systematic review was performed to identify cost-effectiveness analyses performed for non-advanced CRC and ACRC, from which total costs, total gains (LYG or QALYs) and ICERs were extracted. **RESULTS:** Regarding clinical effectiveness, our search identified seven articles for oxaliplatin, six for irinotecan, four for bevacizumab five for cetuximab and four for panitumumab. The cost-effectiveness search yielded 6 articles for non-advanced CRC and 17 articles for ACRC. Clinical effectiveness has been demonstrated in the literature for oxaliplatin, irinotecan and bevacizumab, with on average approximately two to three months additional survival. Effectiveness of panitumumab and cetuximab has mainly been demonstrated on PFS, where on average 2 months is gained. The ICERs of oxaliplatin for non-advanced CRC were between £2,970 and \$24,104/QALY. ICERs reported oxaliplatin and irinotecan combination therapy vs monotherapy with 5-FU in ACRC are between \$10,137/LYG and £58,400/progression free LYG. ICERs for bevacizumab, cetuximab and panitumab in addition to combination chemotherapy in advanced CRC, when reported, are between £17,000/LYG and \$299,613/QALY. **CONCLUSIONS:** Clinical effectiveness of oxaliplatin, irinotecan, bevacizumab, cetuximab and panitumab has been established. However, it is not clear whether the use of these drugs is also cost-effective, especially not for bevacizumab, cetuximab and panitumumab.

PCN79

COST EFFECTIVENESS OF ERLOTINIB IN FIRST LINE TREATMENT OF ADVANCED NON SMALL CELL LUNG CANCER (NSCLC) IN VULNERABLE ELDERLY PATIENTS: AN ECONOMIC ANALYSIS OF A PROSPECTIVE PHASE 2 STUDY (GFPC 0505)

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OBJECTIVES: Weekly gemcitabine and erlotinib are both active in elderly patients treated for NSCLC. The aim of the GFPC0505 randomized phase II trial was to compare the efficacy and the cost of weekly gemcitabine (G) followed by erlotinib after progression (arm A) versus erlotinib followed by G after progression (arm B) in frail elderly patients with advanced non small-cell lung cancer (NSCLC), selected on the basis of a comprehensive geriatric assessment (CGA). **METHODS:** Frail elderly chemotherapy-naïve patients with stage IIIB/IV NSCLC were selected after a CGA. Main clinical outcome was time to second progression (TTP2). Costs were limited to direct medical costs and were prospectively collected until progression, from the third party payer perspective. Health utilities (based on disease states and grade 3-4 toxicities) and costs after progression were derived from the literature. Sensitivity analyses were performed. **RESULTS:** Median age of the 94 enrolled patients was 78.2 years, and 76 (80%) were male. There is no significant difference between the 44 and 50 patients respectively randomized in arm A and B, in terms of efficacy (TTP2: 4.3 and 3.5 months: overall survival: 4.4 and 3.9 months, mean QALY: 0.347 and 0.325) and in terms of mean direct costs (15,363 and 15,236€). **CONCLUSIONS:** In this population, the 2 strategies appeared equivalent in terms of efficacy and costs. Supported by an unrestricted educational grant from Roche

PCN80

COMPARATIVE ANALYSIS OF COST-EFFECTIVENESS BEVACIZUMAB + PACLITAXEL VERSUS USING ONLY VERSUS PACLITAXEL AS FIRST LINE TREATMENT OF PATIENTS WITH METASTATIC BREAST CANCER IN MEXICO PUBLIC INSURANCE (SEGURO POPULAR)

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OBJECTIVES: To evaluate whether the use of bevacizumab + paclitaxel offers best cost-effective results regarding the use of paclitaxel for patients with metastatic breast cancer mBC **METHODS:** The treatment was evaluated up to the progression of the disease, rescue management and palliative up to to death in a Markov model, operating 65 cycles of 28 days. An incremental cost effectiveness analysis and sensitivity analysis was performed considering as an outcome measure progres-